Page 2, line 16 - page 3, line 2, delete the paragraph beginning with "Fig. 1 (A)" and ending with "are boxed." and insert therefor the following:

--Fig. 1A shows synthetic oligomers used in the construction of the baculovirus gene transfer vectors and the gG-1- and gG-2-expressing recombinant baculoviruses. As described herein, oligoduplex AB was used in the construction of pPP-2, oligoduplex V78 in pAcDSM, oligoduplex SR34 in AcDSMgG-1, and oligoduplex D34 in AcDSMgG-2. Relevant restriction endonuclease sites are indicated.

Fig. 1B is a schematic representation of the method of inserting a foreign gene into the transfer vector pAcDSM.

Fig. 1C shows a comparison of nucleotide sequences in the 5' non translated region of the wild type baculovirus (AcNPV) and the recombinant viruses Ac373'gG-1 and AcDSMgG-1. Extraneous nucleotides relative to the wild type polyhedrin sequence are boxed.--

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Page 3, lines 3-21, delete the paragraph beginning with "Fig. 2" and ending with "phage lambda." and insert therefor the following:

--Fig. 2A shows DNA hybridization analysis of Ac373'gG-1. Whole cell DNA extracted from Sf9 cells infected with AcNPV (lanes 1) or Ac373'gG-1 (lanes 2), and DNA of the recombinant transfer plasmid pAc373'gG-1 (lanes 3) were digested with SalI, separated in 0.8% agarose gels, blotted bidirectionally to nitrocellulose membranes, then hybridized with the indicated probes. A photograph of an ethidium bromide stained gel is included for reference.

Fig. 2B demonstrates DNA hybridization analysis of AcDSMgG-1. The experiments were as in Fig.1A with the substitution of the recombinant virus in lanes 2 (AcDSMgG-1) and the recombinant transfer plasmid in lanes 3 (pAcDSMgG-1). Polyhedrin-gene flanking fragments are marked with empty triangles. The fragment containing the polyhedrin gene is marked with full triangles. Fragments carrying gG-1 are indicated with arrows. The size standard is a HindIII digest of phage lambda.

C2

Fig. 2C demonstrates DNA hybridization analysis AcDSMgG-2. The experiments were as in Fig.1A with the substitution of the recombinant virus in lanes 2 (AcDSMgG-2) and the recombinant transfer plasmid in lanes 3 (pAcDSMgG-2). Polyhedrin-gene flanking fragments are marked with empty triangles. The fragment containing the polyhedrin gene is marked with full triangles. Fragments carrying gG-2 are indicated with arrows. The size standard is a HindIII digest of phage lambda.--

Page 3, line 22 - page 4, line 19, delete the paragraph beginning with "Fig. 3" and ending with "is indicated." and insert therefor the following:

C3

Fig. 3A shows the synthesis and processing of baculovirus expressed gG-1. Immunoblots of proteins extracted at 100 h p.i. (hours post infection) from equal numbers of (Ac373'gG-1, AcDSMgG-1 and AcNPV) infected or uninfected Sf9 cells were separated by SDS-PAGE in 11% gels, transferred to nitrocellulose membranes, then reacted with the indicated antibodies.

Fig. 3B shows a quantitative comparison of the amount of gG-1 expressed in Sf-9 cells by the recombinants Ac373'gG-1

and AcDSMgG-1. Cell extracts treated as in Fig. 1 were 4-fold-serially diluted in 0.01 M PBS (pH 7.4), bound to a nitrocellulose membrane using a slot blot apparatus, and reacted with gG-1 specific monoclonal antibody (H1379).

Fig. 3C shows a time course of the synthesis of gG1 in Ac373'gG-1 and AcDSMgG-1 (Lanes a and b, respectively) infected Sf9 cells. Cells were harvested at the indicated times, treated as in A and reacted with a HSV-1-positive human serum specimen.

Fig. 3D shows the immunoblot of proteins extracted from Sf9 cells infected with AcDSMgG-1 grown in the presence (+) or the absence (-) of 3 μg/ml tunicamycin from 24 h p.i. until 54 h p.i. Blots were reacted with gG-1 specific monoclonal antibody (H1379).

Fig. 3E shows the immunoblot analysis of proteins extracted from Sf9 cells infected with AcDSMgG-1 and from HEp-2 cells infected with HSV-1(F). The positions of the molecular mass standards are shown on the side of each panel, (myosin, 200 kDa; β-galactosidase 116.3 kDa; phosphorylase B, 97.4 kDa; bovine serum albumin, 66.2 kDA; ovalbumin, 42.7 kDa; and carbonic

C3

anhydrase, 31 kDa). In all the panels the apparent molecular mass of bands discussed in the text (arrows) is indicated.--

Page 4, line 20 - page 5, line 6, delete the paragraph beginning with "Fig. 4" and ending with "in Fig. 3." and insert therefor the following:

C4

--Fig. 4A shows the immunoblots of proteins extracted at 100 h p.i. separated in a 9% SDS-PAGE gel then transferred to nitrocellulose and reacted with the indicated antibodies.

Fig. 4B shows the time course of the synthesis of gG-2 in AcDSMgG-2 infected Sf9 cells. Proteins extracted from cells harvested at the times indicated were treated as in Fig.4A, then reacted with gG-2-specific-monoclonal antibody (H1206).

Fig. 4C shows the immunoblot of proteins extracted from Sf9 cells infected with AcDSMgG-2 grown in the presence (+) or the absence of 3 μg/ml tunicamycin from 24 h p.i. until 54 h p.i. Blots were reacted with gG-2 specific monoclonal antibody (H1206).

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C4

Fig. 4D shows the immunoblot analysis of proteins extracted from Sf9 cells infected with AcDSMgG-2 and from HEp-2 cells infected with HSV-2(G). In all the panels, the apparent molecular mass of bands discussed in the text (arrows or triangles) is indicated. Molecular mass standards, on the side of each panel, are as described in Fig. 3.--

Page 5, lines ~~7-18~~, delete the paragraph beginning with "Fig. 5" and ending with "as for Fig. 3." and insert therefor the following:

C5

--Fig. 5A shows the immunoblot analysis of the HSV type-specificity of the reaction of human serum specimens with AcDSMgG-1- and AcDSMgG-2-infected-Sf9-cell extracts. Proteins were separated by SDS-PAGE in a 11% gel, transferred to nitrocellulose, then reacted with serum specimens known to be HSV-1 positive and HSV-2 negative.

Fig. 5B shows the immunoblot analysis of the HSV type-specificity of the reaction of human serum specimens with AcDSMgG-1- and AcDSMgG-2-infected-Sf9-cell extracts. Proteins were separated by SDS-PAGE in a 11% gel, transferred to nitrocellulose, then reacted with serum specimens known to be

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